# Computer Science Advisory Board Meeting Fall 2020

Michael Soltys, Dec 4, 2020

## **Agenda** Comp Sci Advisory Board Meeting Dec 4, 2020, 1:00-2:00

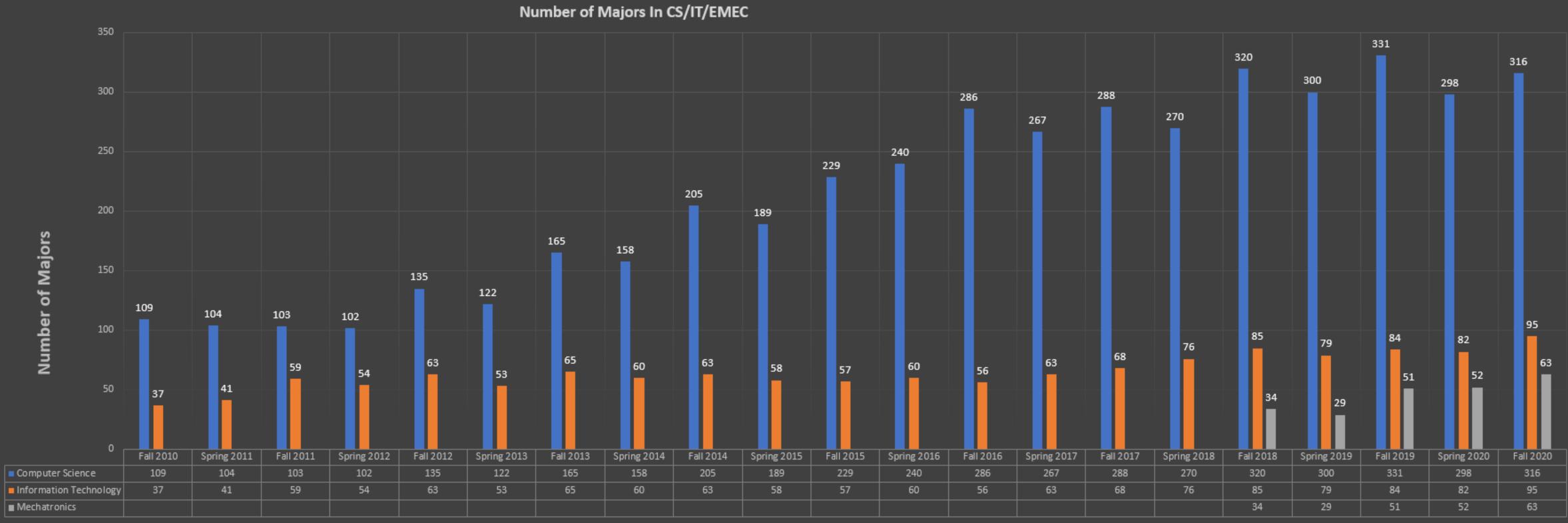
- 1. Introduction by Chris Meissner (5min)
- 2. Update on department by Michael Soltys (20min + questions)
- Update on Mechatronics Engineering by Bahareh Abbasi and Vida Vakilian (20min + questions)

At least 50% of students majoring in these programs reported having a positive (awesome or pretty good) experience with virtual learning in Fall 2020. Please note that reported virtual experiences include classes outside of students' major program.

### Students With Positive Experiences By Major:

- Computer Science
- ESRM
- Spanish
- Health Science

- Nursing
- Liberal Studies
- Performing Arts



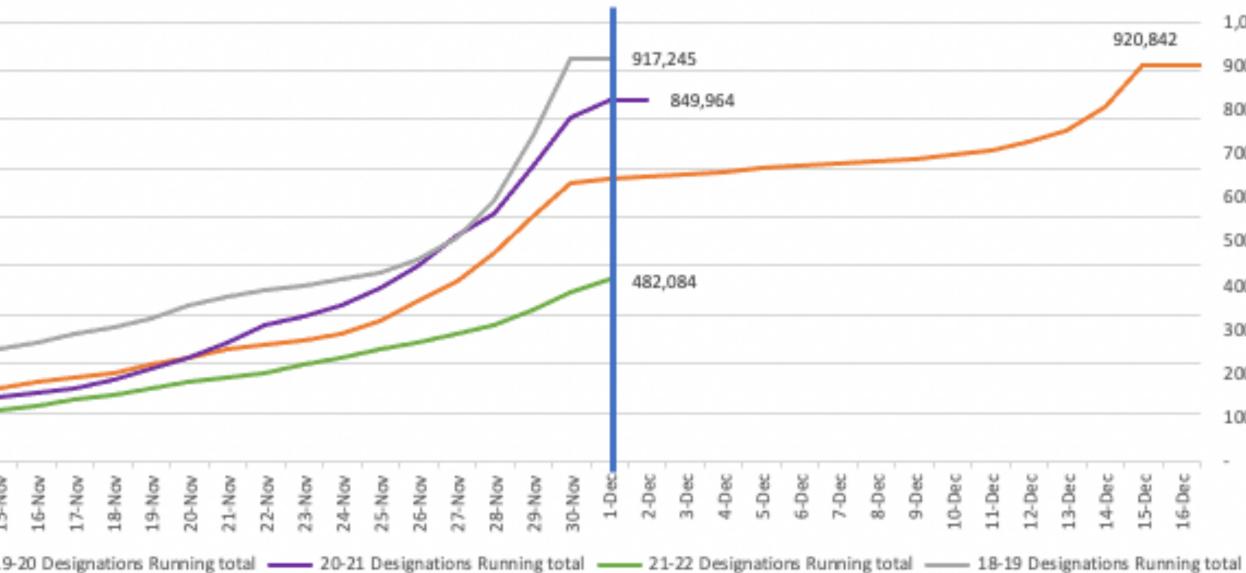
Computer Science Information Technology Mechatronics

	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020
CS	320	300	331	298	316
IT	85	79	84	82	95
EMEC	34	29	51	52	63

Term

### **Enrollments** Troublesome trends

Туре	CSU System	CSUCI	1,010,000
Freshman	-40%	-28%	810,000
Transfer	-51%	-17%	510,000
Undergrad	-44%	-25%	310,000 210,000 110,000
Grad	-25%	11%	



### Cycle comparison total submitted designations

1,000,000 900,000 800,000 700,000 600,000 500,000 300,000 200,000 100,000

## Updates Grants

- We received internal grants such as SURF, MiniGrant
- Vida and Reza obtained the first departmental NSF grant
- Faculty submitted grants to DoD
- Fellowships with the Office of Naval Research

## **Updates** Publications

- Abbasi: Role Switching in Task-Oriented Multimodal Human-Robot Collaboration" at the 29th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)
- Isaacs: Programming, Robotics, and Control for High School Students. ASEE Advances in Engineering Education; Congestion Strategies for Clustered Central Place Foraging. International Conference on Automation, Robotics and Applications
- Thoms: 4 papers, e.g., Real-Time Visualization to Improve Quality in Computer Mediated Communication, in Web Intelligence Journal, etc

- Abdolee: 3 papers in in top-tier journals in electrical and computer IEEE Trans. on Vehicular Technology
- Soltys: book mentioned in Notable Titles in Algorithms; working on 4th edition. 6 papers: 3 on the cloud, one cybersec for Navy, two ML

engineering, including IEEE Trans. on Signal Processing, IEEE Access, and

 Kaltman: Attending to Process and Data: A Research Alignment for Historical Videogame Production Artifacts and Their Archives" accepted for publication in ROMChip: A Journal of Game Histories; Emulation as a Service server set up as new node in the Emulation as a Service Infrastructure (EaaSI) project. EaaSI is a collaboration between Yale University, Stanford University, Notre Dame, Carnegie Mellon, UC San Diego and the University of Virginia; Digital Humanities, "From the Presupposition of Doom to the Manifestation of Code: Using Emulated Citation in the Study of Games and Cultural Software", features the first use of indexed emulated state in an academic publication

### Updates Furthermore

- for our Mechatronics program: Modeling of Mechatronics systems
- Kaltman: revamping our Games offering
- Many MSCS theses defenses
- Patents granted (Isaacs and Abdolee): System and method for localization and tracking using GNSS location estimates, satellite SNR data and 3D maps; cybersecurity for Internet of Things (IoT) applications and devices
- presentations at two national research conferences; Awarded hundreds-ofthousands of CPU-hours at national supercomputers

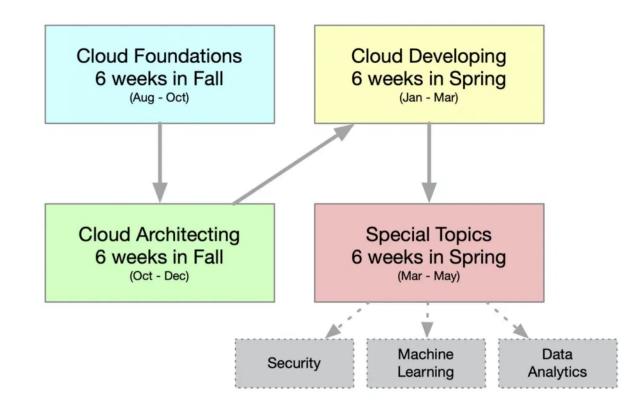
Abbasi: a graduate-level course: Neural Network and an undergraduate-level course

• Feister: several new national collaborations in government and industry, following

## AWS Partnership



- https://prof.msoltys.com/? p=5766 (Cloud training)
- https://prof.msoltys.com/? <u>p=5751</u> (Machine Learning Pilot)



### Highlights

- Classes prepare the students for the corresponding AWS certification.
- Materials and AWS accounts / labs included. No costs other than the tuition cost.
- Classes conveniently online, using the Canvas LMS and Zoom for meetings.
- Students can join at any point in the sequence according to their background knowledge.

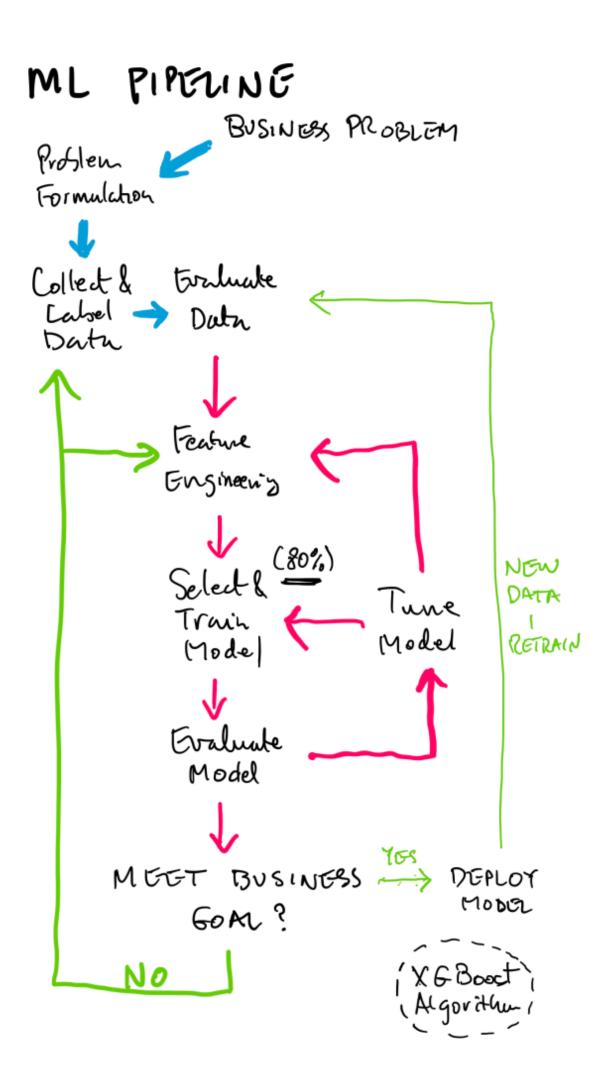
Info Sessions: To be held monthly on Zoom.

For questions and info sessions: jeff.ziskin@csuci.edu

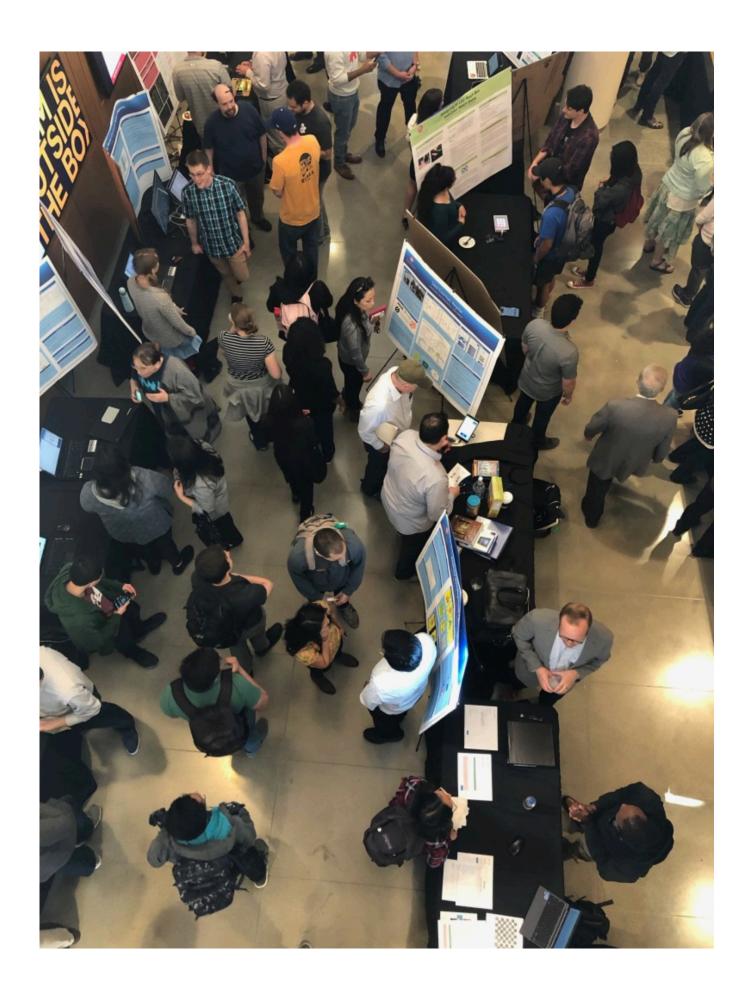
More info:

- www.msoltys.com/aws
- https://ext.csuci.edu/programs/professionalcommunity-ed/aws

Updated: Michael Soltys on October 5, 2020



## **Conclusion - Virtual Capstone Showcase** Summary of today's meeting and links to capstones later today at:



https:// prof.msoltys.com/ ?p=5849